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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/790,264

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Siroos K. Afshar

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EXAMINER

ADDY, THJUAN KNOWLIN

ART UNIT

PAPER NUMBER

2614

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/790,264	AFSHAR ET AL.	
	Examiner	Art Unit	
	THJUAN K. ADDY	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>03/01/2004; 02/27/2007; 03/01/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

1. Claims 42-44 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

2. Applicant's specification (See pg. 26, line 16) discloses, in regards to the computer useable medium, "downloading through an electronic **transport medium...**"

When nonfunctional descriptive material is recorded on some computer-readable medium, in a computer, or on an electromagnetic carrier signal, it is not statutory since no requisite functionality is present to satisfy the practical application requirement.

Merely claiming nonfunctional descriptive material, stored in a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory.

3. Furthermore, the language of claims 42-44 is unacceptable. Claim 42 recites, "A computer-readable medium whose contents cause a computer system to perform call connection services..." Claim 42, for example, should recite, "A computer-readable medium encoded with computer executable instructions for performing call connection services..." or "A computer-readable medium encoded with instructions capable of being executed by a computer for performing call connection services..."

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-44 are rejected under 35 U.S.C. 102(e) as being anticipated by Klaghofer et al. (US Patent Application, Pub. No.: US 2004/0249963 A1).
5. In regards to claim 1, Klaghofer discloses a scalable system for providing real time communication services between user devices (See pg. 1, paragraph [0012]), the scalable system comprising: at least one call control element (CCE) (e.g., gatekeeper GK) providing system call control (e.g., connection/call control) functions (See pg. 2, paragraph [0026]); at least one scalable border element (BE) (e.g., address resolution device BE/border element) providing scalable system interface functions and in communication with said CCE (See pg. 4, paragraph [0036]); a first user device (e.g., communication terminating device associated with communication network KN1) for initiating a call and in communication with said scalable BE; and a second user device (e.g., communication terminating device associated with communication network KN2) acting as a call destination device and in communication with said scalable BE (See pg. 2, paragraph [0026] and pg. 4, paragraph [0036]).
6. In regards to claims 2 and 32, Klaghofer discloses the scalable system and

decomposed BE, wherein the at least one scalable border element (BE) providing scalable system interface functions further comprises: signaling functions including call setup signaling functions; media control functions including transcoding functions; security functions including firewall and encryption and decryption functions; and call admission control functions including call authentication functions (See pg. 3, paragraph [0028] – [0030] and pg. 4, paragraph [0036]).

7. In regards to claim 3, Klaghofer discloses the scalable system, wherein the at least one scalable border element further comprises: a BE signaling entity providing BE signaling functions and in communication with said CCE; a first BE media entity providing BE media functions in communication with said BE signaling entity and in communication with said first user device for initiating a call; and a second BE media entity providing BE media functions in communication with said BE signaling entity, in communication with said first BE media entity for media transfers and in communication with said second user device acting as a call destination device (See pg. 2, paragraph [0026]; pg. 3, paragraph [0028] – [0030]; and pg. 4, paragraph [0036]).

8. In regards to claims 4, 23, 28, and 35, Klaghofer discloses the scalable system, BE signaling entity, BE media entity, and decomposed BE, wherein the BE signaling functions further comprises: user agent functions; proxy functions; and back to back user agent functions (See pg. 3, paragraph [0035]).

9. In regards to claims 5, 24, 29, and 37, Klaghofer discloses the scalable system, BE signaling entity, BE media entity, and decomposed BE, wherein the BE media functions further comprises: dual tone multi-frequency (DTMF) digit detection; real time

protocol (RTP) re-origination; firewall/NAT functions; and media transcoding functions (See pg. 3, paragraph [0028] – [0030]).

10. In regards to claim 6, Klaghofer discloses the scalable system, further comprises: at least one application server (AS) providing at least one scalable system service function and in communication with said CCE (See pg. 2, paragraph [0026] and pg. 3, paragraph [0033]).

11. In regards to claims 7, 20, and 36, Klaghofer discloses the scalable system, BE signaling entity, and decomposed BE, wherein the communication with said CCE uses a session initiation protocol (SIP) (See pg. 2, paragraph [0023]; pg. 2, paragraph [0026]; pg. 3, paragraph [0028]; and pg. 3, paragraph [0033]).

12. In regards to claims 8, 21, 26, and 38, Klaghofer discloses the scalable system, BE signaling entity, BE media entity, and decomposed BE, wherein the said communication with the BE signaling entity is a master/slave protocol where the BE signaling entity acts as the master and the BE media entity acts as the slave (See pg. 2, paragraph [0023] and pg. 4, paragraph [0036]).

13. In regards to claim 9, Klaghofer discloses the scalable system, further comprises: said first BE media entity and said second BE media entity located physically apart from each other and in closer proximity to said user devices than to said BE signaling entity; and a call being placed between the said first and second user devices comprising signaling messages and media transfers, wherein the timing threshold for the signaling messages is less than a few seconds and the timing threshold for the media transfers is less than 300 milliseconds or a value not to exceed the perceptible limit of naturalness

of interactive human communication (See pg. 2, paragraph [0026]; pg. 3, paragraph [0030]; and pg. 4, paragraph [0036]).

14. In regards to claim 10, Klaghofer discloses the scalable system, wherein upon a DTMF digit is detected by the BE media entity the BE media entity notifies the BE signaling entity of DTMF digit detection which notifies the AS of the event over a separate signaling path (See pg. 3, paragraph [0033] and pg. 4, paragraph [0036]).

15. In regards to claim 11, Klaghofer discloses the scalable system, further comprises: a call admission control (CAC) entity in communication with said scalable BE and in communication with said CCE; a media server (MS) entity in communication with said CCE; a service broker (SB) entity in communication with said CCE; and a network routing engine (NRE) in communication with said CCE (See pg. 2, paragraph [0026]; pg. 3, paragraph [0029] – [0030]; and pg. 4, paragraph [0038]).

16. In regards to claim 12, Klaghofer discloses the scalable system, wherein the at least one scalable border element further comprises: a BE signaling entity providing BE signaling functions and in communication with said CCE; a first BE media entity providing BE media functions in communication with said BE signaling entity; a second BE media entity providing BE media functions in communication with said BE signaling entity and in communication with said first BE media entity for-media transfers; a first BE firewall/network address translation (FW/NAT) entity providing BE FW/NAT functions in communication with said first BE media entity and in communication with said first user device for initiating a call; and a second BE firewall/network address translation (FW/NAT) entity providing BE FW/NAT functions in communication with said

second BE media entity and in communication with said second user device acting as a call destination device (See pg. 3, paragraph [0028]; pg. 3, paragraph [0032]; and pg. 3, paragraph [0034]).

17. In regards to claim 13, Klaghofer discloses the scalable system, wherein the BE media functions further comprises: dual tone multi-frequency (DTMF) digit detection; real time protocol (RTP) re-origination; and media transcoding functions (See pg. 3, paragraph [0028] – [0030]).

18. In regards to claim 14, Klaghofer discloses the scalable system, wherein the at least one scalable border element further comprises: a BE signaling entity providing BE signaling functions and in communication with said CCE; at least one media transcoding entity providing BE media transcoding functions; a first BE media entity providing BE media functions in communication with said BE signaling entity and in communication with said at least one media transcoding entity; a second BE media entity providing BE media functions in communication with said BE signaling entity, in communication with said first BE media entity for media transfers and in communication with said at least one media transcoding entity; a first BE firewall/network address translation (FW/NAT) entity providing BE FW/NAT functions in communication with said first BE media entity and in communication with said first user device for initiating a call; and a second BE firewall/network address translation (FW/NAT) entity providing BE FW/NAT functions in communication with said second BE media entity and in communication with said second user device acting as a call destination device (See pg. 3, paragraph [0028]; pg. 3, paragraph [0032]; and pg. 3, paragraph [0034]).

19. In regards to claim 15, Klaghofer discloses the scalable system, wherein the BE media functions further comprises: dual tone multi-frequency (DTMF) digit detection; and real time protocol (RTP) re-origination (See pg. 3, paragraph [0030] – [0031]).

20. In regards to claim 16, Klaghofer discloses a method of connecting a call between user devices using a scalable system with user devices external to the scalable system (See pg. 1, paragraph [0012]), the method comprising: connecting a user device for initiating a call to a first BE media entity and to a BE signaling entity; receiving in the BE signaling entity a signaling message from a user device to setup a call; communicating the signaling message from the BE signaling entity to a call control element (CCE) (e.g., gatekeeper GK) that manages the call flow process and determines a path to a destination user device and a second BE media entity associated with the destination user device; opening pinholes for media streams; connecting the said first BE media entity to the second BE media entity for media transfers; communicating between the CCE and the second BE media entity to determine if transcoding is required and if it is invoking the appropriate BE media entity to provide the transcoding function; and establishing the call connection between the user device initiating the call and the destination user device (See pg. 2, paragraph [0026]; pg. 3, paragraph [0028] – [0030]; and pg. 4, paragraph [0036]).

21. In regards to claim 17, Klaghofer discloses the method, wherein the call connection may be terminated, the method further comprises: communicating between said CCE and said BE signaling entities when either said user device indicates it is ending the call; and communicating call termination from said CCE to said first and

second BE media entities to close the pinholes thereby terminating the call (See pg. 2, paragraph [0026] and pg. 4, paragraph [0036]).

22. In regards to claim 18, Klaghofer discloses the method, wherein said CCE that manages of the call flow process and determines the destination BE and its associated BE media entity further comprises: communicating with a service broker to determine whether a service feature is required; communicating with an application server to service the call; and communicating with a media server to provide media stream functions if required (See pg. 3, paragraph [0030]; pg. 3, paragraph [0033]; and pg. 4, paragraph [0036]).

23 In regards to claims 19, 25, and 31, Klaghofer discloses a border element (BE) signaling entity, BE media entity, and decomposed BE (e.g., address resolution device BE/border element) providing signaling functions to at least one connected BE media entity providing media functions and a connected call control element (CCE), the BE signaling entity comprising: a communication interface to said BE media entity; and a communication interface to said CCE (See pg. 3, paragraph [0032] and pg. 4, paragraph [0036]).

24. In regards to claims 22, 27, and 39, Klaghofer discloses the BE signaling entity, BE media entity, and decomposed BE, wherein the master-slave protocol is media gateway control protocol (MGCP) or media gate control protocol (MEGACO) or internet protocol device control (IPDC) (See pg. 3, paragraph [0029] and pg. 3, paragraph [0031]).

25. In regards to claims 30 and 40, Klaghofer discloses the BE media entity and

decomposed BE, wherein the communication interface to at least one other BE media entity uses real time protocol (RTP) (See pg. 2, paragraph [0025] and pg. 3, paragraph [0031]).

26. In regards to claim 33, Klaghofer discloses the decomposed BE, wherein the call setup signaling functions further comprises: access control functions for security; quality of service functions; and accounting functions (See pg. 3, paragraph [0028] and pg. 4, paragraph [0038]).

27. In regards to claim 34, Klaghofer discloses decomposed BE, wherein the transcoding functions further comprises: determination whether transcoding is required; determining the type of transcoding required; setting up the path to include transcoding if required; and transcoding the communications between connected users if required (See pg. 3, paragraph [0030] – [0031] and pg. 3, paragraph 0035]).

28. In regards to claims 41, Klaghofer discloses the decomposed BE, wherein the communication with at least one user device uses RTP (See pg. 2, paragraph [0025] and pg. 3, paragraph [0031]) and SIP (See pg. 2, paragraph [0023]; pg. 2, paragraph [0026]; pg. 3, paragraph [0028]; and pg. 3, paragraph [0033]).

29. In regards to claim 42, Klaghofer discloses a computer-readable medium whose contents cause a computer system to perform call connection services between user devices using decomposed border elements (BEs), made up of at least one BE signaling entity and a plurality of BE media entities, between the user devices and the computer system, by performing the steps of: connecting a user device for initiating a call to a first BE media entity and to a BE signaling entity; receiving in the BE signaling

entity a signaling message from a user device to setup a call; communicating the signaling message from the BE signaling entity to a call control element (CCE) that manages the call flow process and determines a path to a destination user device and a second BE media entity associated with the destination user device; opening pinholes for media streams; connecting the said first BE media entity to the second BE media entity for media transfers; communicating between the CCE and the second BE media entity to determine if transcoding is required and if it is invoking the appropriate BE media entity to provide the transcoding function; and establishing a call connection between the user device initiating the call and the destination user device (See pg. 2, paragraph [0026]; pg. 3, paragraph [0028] – [0030]; pg. 3, paragraph [0032]; and pg. 4, paragraph [0036]).

30. In regards to claim 43, Klaghofer discloses the computer readable medium, wherein the call connection may be terminated, by further performing the steps of: communicating between said CCE and said BE signaling entities when either said user device indicates it is ending the call; and communicating call termination from said CCE to said first and second BE media entities to close the pinholes thereby terminating the call (See pg. 2, paragraph [0026] and pg. 4, paragraph [0036]).

31. In regards to claim 44, Klaghofer discloses the computer readable medium, wherein said CCE that manages of the call flow process and determines the destination BE and its associated BE media entity by further performing the steps of: communicating with a service broker to determine whether a service feature is required; communicating with an application server to service the call; and communicating with a

media server to provide media stream functions if required (See pg. 3, paragraph [0030]; pg. 3, paragraph [0033]; and pg. 4, paragraph [0036]).

Conclusion

32. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hoffpauir et al. (US 6,625,274) teach a computer system and method for providing services to users of communication systems using service entities, interface entities, and a service bus.

33. Any inquiry concerning this communication or earlier communications from the examiner should be directed to THJUAN K. ADDY whose telephone number is (571)272-7486. The examiner can normally be reached on Mon-Fri 8:30-5:00pm.

34. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar can be reached on (571) 272-7488. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2614

35. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thjuan K. Addy/
Primary Examiner, Art Unit 2614